

CLAIMS

1. An ion attachment mass spectrometry apparatus causing positively charged metal ions to attach to analyte molecules to be measured in an attachment region to generate attached ions and then performing mass spectrometry on said attached ions by a mass spectrometer, comprised of:

a metal ion emitter for emitting said metal ions to said attachment region,

an introduction unit for introducing said analyte molecules into said attachment region,

a metal ion selective disassociating unit for selectively making said metal ions attached to specific molecules in said attachment region disassociate, and

a mass spectrometer for performing said mass spectrometry on said attached ions.

2. The ion attachment mass spectrometry apparatus as set forth in claim 1, wherein said metal ion selective disassociating unit includes means for selectively heating only specific molecules.

3. The ion attachment mass spectrometry apparatus as set forth in claim 2, wherein said means for selectively heating only said specific molecules is a means for emitting electromagnetic waves having a frequency matching an absorption band of said specific molecules.

4. The ion attachment mass spectrometry apparatus as set forth in claim 3, wherein the frequency of said electromagnetic waves matches an absorption band of said specific molecules, but does not match any absorption band of said analyte molecules.

5. The ion attachment mass spectrometry apparatus as set forth in claim 1, wherein said metal ion selective disassociating unit includes means for emitting electromagnetic waves having a frequency exciting vibration of said attached ions formed by said specific molecules and said attached metal ions.

6. The ion attachment mass spectrometry apparatus as set forth in claim 1, wherein said metal ion selective disassociating unit includes means for emitting electromagnetic waves having a frequency corresponding to a bonding energy of said metal ions at said attached ions formed by said specific molecules and said attached metal ions.

7. An ion attachment mass spectrometry apparatus causing positively charged metal ions to attach to analyte molecules to be measured in an attachment region to generate attached ions and then performing mass spectrometry on said attached ions by a mass spectrometer, comprised of:

- a metal ion emitter for emitting said metal ions to said attachment region,

- an introduction unit for introducing said analyte molecules into said attachment region,

- a metal ion attachment inhibiting unit for inhibiting attachment of said metal ions to specific molecules in said attachment region

- a mass spectrometer for performing said mass spectrometry on said attached ions.

8. The ion attachment mass spectrometry apparatus as set forth in claim 7, wherein said metal ion attachment inhibiting unit includes means for selectively heating only said specific molecules.

9. The ion attachment mass spectrometry apparatus as set forth in claim 8, wherein said means for selectively heating only said specific molecules is a means for emitting electromagnetic waves having a frequency matching an absorption band of said specific molecules.

10. The ion attachment mass spectrometry apparatus as set forth in claim 9, wherein the frequency of said electromagnetic waves matches an absorption band of said specific molecules, but does not match any absorption band of said analyte molecules.

11. The ion attachment mass spectrometry apparatus as set

forth in claim 1, wherein said specific molecules are H_2O .

12. The ion attachment mass spectrometry apparatus as set forth in claim 7, wherein said specific molecules are H_2O .